



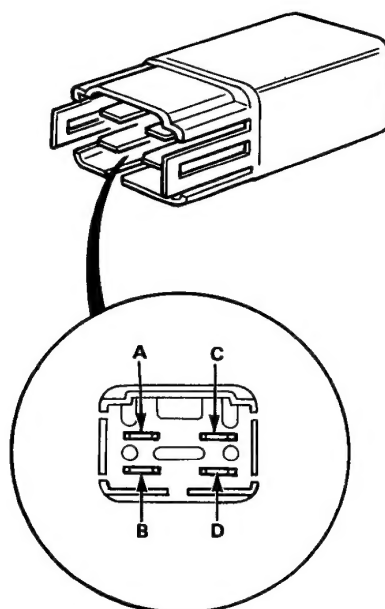
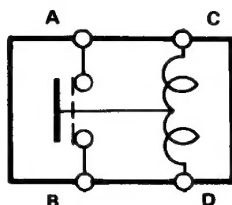
Troubleshooting

NOTE: The numbers in the table show the troubleshooting sequence.

Symptom \ Item to be inspected	State of charge and clean and tight connections of battery	Power window relay	in the dash fuse box			Drivers door switch input	Driver's switch	Passenger's switch	Driver's motor	Pulser (in driver's motor)	Passenger's motor	Window regulator	Poor ground	Open circuit in wires or loose or disconnected terminals
			No. 5 20 (A)	No. 6 20 (A)	No. 11 20 (A)									
All windows do not operate.	1	3			2								G401, 402, 471	GRN/BLK, WHT/BLU, BLU/WHT ¹ or BLK
Driver's window does not operate in any position.				1		4	2		3			5		WHT/YEL
Driver's window does not operate in AUTO.						3	1			2				BLU
Passenger's window does not operate.			1				2	3			4	5		BLU/BLK

Relay Test

1. Remove the power window relay from the dash relay holder.
2. There should be continuity between the A and B terminals when the battery is connected to the C and D terminals. There should be no continuity when the battery is disconnected.



Power Window

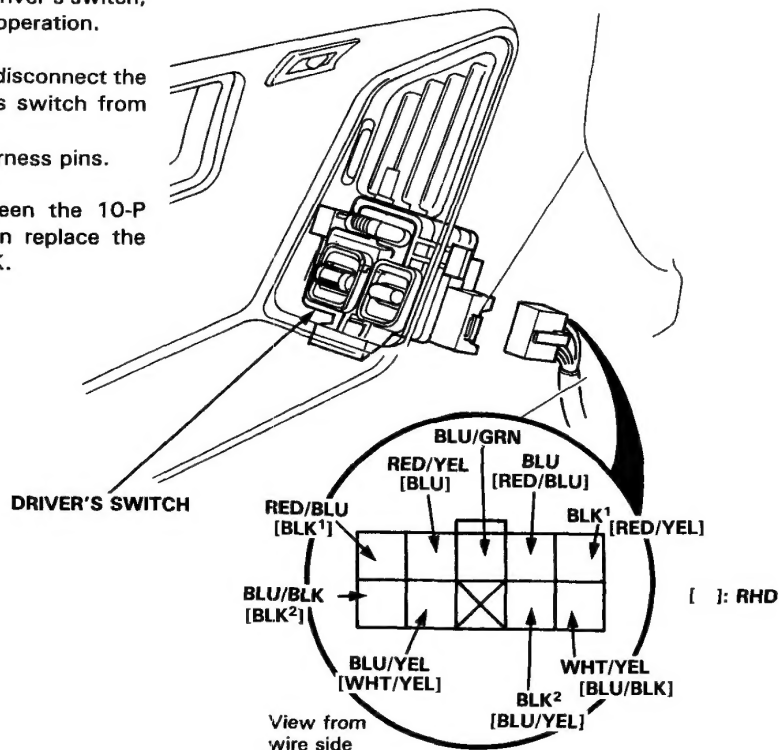
Driver's Switch Input Test

NOTE: The control unit is built into the driver's switch, and only controls driver's door window operation.

Remove the driver's door trim panel and disconnect the 10-P connector and remove the driver's switch from the door trim panel.

Make the following input tests at the harness pins.

NOTE: Recheck the connections between the 10-P connector and the driver's switch, then replace the driver's switch if all input tests prove OK.

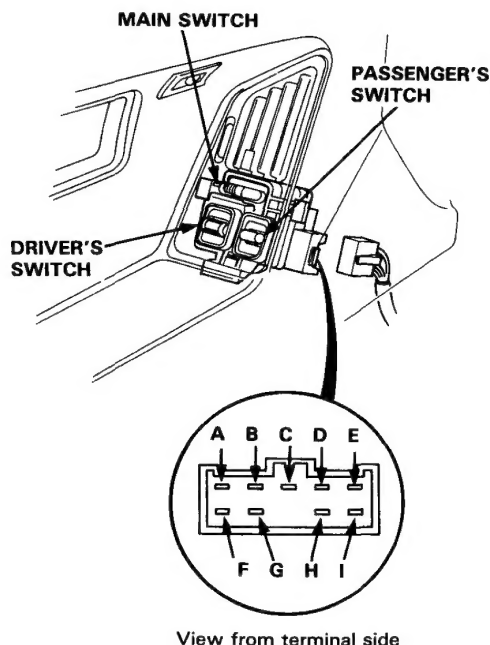


No.	Terminal	Test condition	Test: desired result	Possible cause (if result is not obtained)
1	BLK ¹	Under all conditions.	Check for continuity to ground: should be continuity.	<ul style="list-style-type: none"> • Poor ground (G401, 402, 471). • An open in the wire.
2	WHT/YEL BLU/BLK	Ignition switch ON.	Check for voltage to ground: should be battery voltage.	<ul style="list-style-type: none"> • Blown No. 5 or 6 (20 A) fuse. • Faulty power window relay. • An open in the wire.
3	RED/BLU and RED/YEL	Connect the WHT/YEL terminal to the RED/BLU terminal, and the RED/YEL terminal to the BLK terminal, then ignition switch ON.	Check the driver's motor operation: should run.	<ul style="list-style-type: none"> • Faulty driver's motor. • An open in the wire.
4	BLU/YEL and BLU/GRN	Connect the BLU/BLK terminal to the BLU/YEL terminal, and the BLU/GRN terminal to the BLK terminal, then ignition switch ON.	Check the passenger's motor operation: should run.	<ul style="list-style-type: none"> • Faulty passenger's motor • Faulty passenger's switch • An open in the wire.
5	BLU and BLK ²	Connect the WHT/YEL terminal to the RED/YEL terminal, and the BLK ¹ terminal to the RED/BLU terminal, then ignition Switch ON.	Check for resistance between the BLU and BLK ² terminals: should indicate between 20—50 ohms as the driver's motor runs.	<ul style="list-style-type: none"> • Faulty pulser. • Faulty driver's motor. • An open in the wire.



Driver's Switch Test

1. Remove the door trim panel.
2. Check for continuity between the terminals in each switch position according to the tables.



LHD:

Driver's Switch

Position	Terminal	A	B	H	I
UP (AUTO)*		○	—	—	○
UP		○	—	—	○
OFF		○	○	○	
DOWN			○	—	○
DOWN (AUTO)			○	—	○

Passenger's Switch

Position	Terminal	C	E	F	G
UP	ON		○	○	○
	OFF			○	○
OFF	ON	○	○		○
	OFF	○			○
DOWN	ON	○	○	○	
	OFF	○		○	

RHD:

Driver's Switch

Position	Terminal	D	E	F	G
UP (AUTO)*		○	—	—	○
UP		○	—	—	○
OFF		○	○	○	
DOWN			○	—	○
DOWN (AUTO)			○	—	○

Passenger's Switch

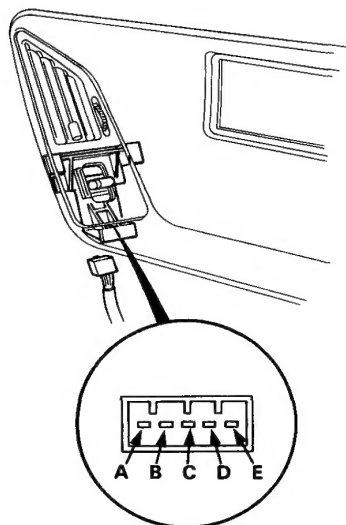
Position	Terminal	A	C	H	I
UP	ON	○	—	○	○
	OFF			○	○
OFF	ON	○	○	○	
	OFF		○	○	
DOWN	ON	○	○	—	○
	OFF		○	—	○

*UP (AUTO)...Standard for some types

Power Windows

Passenger's Switch Test

1. Remove the door trim panel.
2. Check for continuity between the terminals in each switch position according to the table.



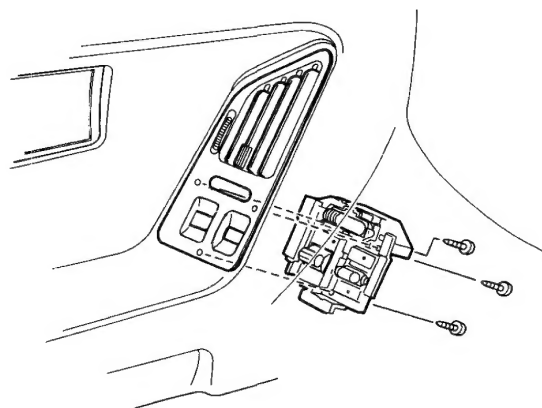
View from
wire side

Terminal Position	A	B	C	D	E
UP				○—○	
OFF	○—○		○—○		○—○
DOWN		○—○		○—○	

Switch Replacement

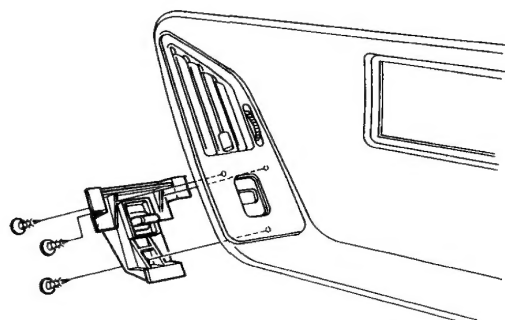
Driver's Switch:

1. Remove the door trim panel.
2. Remove the switch from the door trim panel by releasing the 3 mounting screws.



Passenger's Switch:

1. Remove the door trim panel.
2. Remove the switch from the door trim panel by releasing the 3 mounting screws.

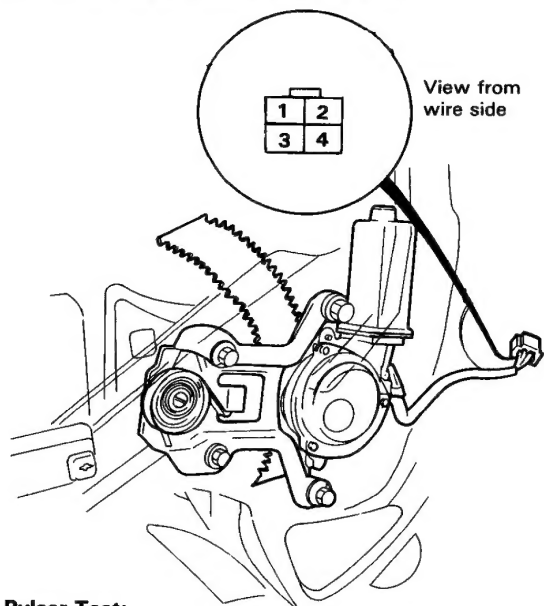




Driver's Motor Test

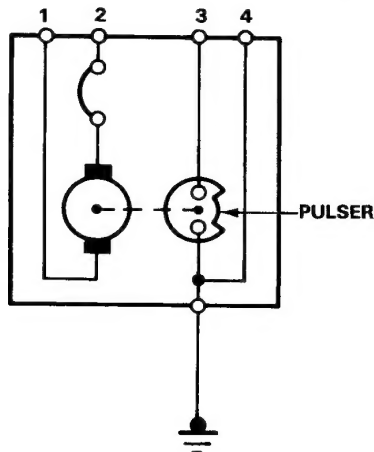
Motor Test:

1. Remove the door trim panel.
2. Disconnect the 4-P connector from the power window control unit.
3. Test motor operation by connecting battery voltage to the No. 1 and No. 2 terminals. Test the motor in each direction, by switching the leads from the battery.
4. If the motor does not run, replace it.



Pulser Test:

Measure resistance between the No. 3 and No. 4 terminals when running the motor by connecting battery voltage to the No. 1 and No. 2 terminals. Ohmmeter should indicate between 20–50 ohms as the motor runs.



Passenger's Motor Test

1. Remove the door trim panel.
2. Disconnect the 2-P connector from the motor.
3. Test motor operation by connecting battery voltage to the No. 1 and No. 2 terminals. Test the motor in each direction, by switching the leads from the battery.
4. If the motor does not run, replace it.

